Space group : Following systematic absences of reflections were observed

hkl	:	No conditions
hk0	:	$h+k = 2n$
0kl	:	No conditions
hhl	:	No conditions

and therefore, *P4/nmm* was assigned as the probable space group.

The authors express their sincerest gratitude to Prof W O Milligan, R. A. Welch Foundation, Houston, Texas and to Prof G P. Dube, Head of the University Department of Physics, P.U. for constant encouragements. Thanks are also due to Dr C. D. Dwivedi

References

Azaroff & Buerger 1958 *The Powder Method*
Milligan W. O. 1966

Indian J. Phys. **47**, 507–508 (1973)

Preliminary X-ray data of Cu(II)-bis(glycocyamine)

INDRAJIT DAS* AND PRABIR KUMAR SAHA*

Central Scientific Serivices, Indian Association for the Cultivation of Science, Jadavpur, Calcutta-32

(*Received* 24 *October* 1972)

Glycocyamine or guamidoacetic acid is an important amino acid. Its functions in the biological system are wellknown. An X-ray study of the crystals of the copper complex of glycocyamine *i e.* $Cu(NH_2CNHNHCH_2COO)_2$ has been undertaken Preliminary data of this investigation is presented here

The compound was prepared by heating a solution of glycocyamine with freshly prepared basic copper carbonate in stoichiometric ratio. The resultant solution was evaporated slowly and the copper complex of glycocyamine crystallized in deep blue plates. The crystals cleaved fairly well along (010) and (001) which were along the face diagonals of the plates They were quite stable at ordinary temperature and humidity.

Rotation and Weissenberg photographs along a and b axes showed that the crystals belong to the monoclinic system with $a = 13.44$Å, $b = 13.85$Å $c = 9.43$Å

* Students of M.Sc. (Physics), Presidency College, Calcutta-12. This work was undertaken as a part of the Open House Programme on the occasion of the Silver Jubilee Celebration of the Indian Independence at the I.A.C.S.

and $\beta = 95.0°$. The only systematic absences were for $0k0$ with k odd and $h0l$ for l odd, indicating that the space group is $P2_{1/c}$. Density of the crystals determined by the method of floatation in a mixture of bromoform and benzene was found to be 1.99 while that calculated for 8 formula units of $Cu(N_3C_3O_2H_6)_2$ in the unit cell was 1.98. But the space group $P2_{1/c}$ requires only 4 asymmetric units per unit cell. Therefore there are two molecules of the complex per asymmetric unit.

The authors are thankful to Dr. Sankarananda Guha for constant guidance throughout this work and to Dr R K. Sen for encouragements and discussions They also thank the authorities of the Indian Association for the Cultivation of Science for providing facilities to work in the laboratory.